
THE MASSACHUSETTS WATER RESOURCES COMMISSION



Scituate Reservoir in Drought, August 2016

(photo: Qainat Khan/WBUR)

ANNUAL REPORT, FISCAL YEAR 2017



Commonwealth of Massachusetts

CHARLES D. BAKER
Governor

MATTHEW A. BEATON
Secretary
Executive Office of Energy and Environmental Affairs

MEET THE WATER RESOURCES COMMISSION

THE COMMISSION'S ROLE AND STRUCTURE

The Water Resources Commission (Commission) was established in 1956 by the Massachusetts Legislature and is responsible for developing, coordinating, and overseeing the Commonwealth's water policy and planning activities to ensure that Massachusetts will have plentiful water to support health, safety, economic development, and ecological vitality for generations to come.

The twelve-seat Commission includes appointees from seven state agencies or offices and five public members.

The Commission's Executive Director, based at the Executive Office of Energy and Environmental Affairs (EEA), and its technical staff, based at the Department of Conservation and Recreation's (DCR) Office of Water Resources, work with state and federal agencies and members of the public to support the Commission's work.

RESPONSIBILITIES OF THE COMMISSION

1. Spearhead **water policy** and **long-range water resources planning** for Massachusetts
2. Manage a **statewide precipitation network** for monitoring and critical research
3. Cooperate with the USGS to provide timely **scientific research and real-time hydrologic monitoring statewide**
4. Administer the **Interbasin Transfer Act** to ensure environmental protection when it is necessary to transfer water or wastewater between the major river basins of the state
5. Closely track hydrologic conditions and advise the state **Drought Management Task Force** in response to drought conditions
6. Provide **Water Needs Forecasts** for approximately 180 communities for their long-range planning and for use in applying for water withdrawal permits
7. Establish statewide **Water Conservation Standards** to encourage efficient use of water
8. **Review and approve water regulations** as mandated by statute
9. Provide a **forum for public input, coordination, and diverse viewpoints** on current and long-term water policies and issues at monthly meetings

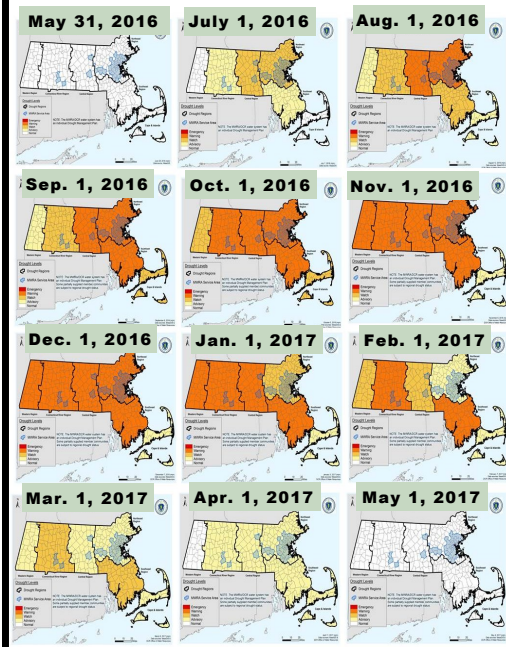
These responsibilities establish the scientific and policy foundation for the sustainability of Massachusetts' water resources.

COMMISSION PROGRAMS	PROGRAMS DESCRIPTION AND FY 2017 WORK
<p>TRACKING HYDROLOGIC CONDITIONS AND ADVISING ON DROUGHT</p> <p>www.mass.gov/dcr/water-data-tracking</p> <p>www.mass.gov/dcr/drought</p> <p>www.mass.gov/eea/wrc-dmtf</p>	<p>WRC staff monitor and report water conditions monthly, including precipitation trends, rainfall deficits, river conditions, groundwater levels, reservoir levels and drought status.</p> <p>Operational since 1956, the Commission-managed precipitation monitoring network provides data from more than 200 active and historical monitoring stations in Massachusetts. These data are used to:</p> <ul style="list-style-type: none"> • monitor for drought • support climate and other research • update design standards for infrastructure <p>In FY2017, WRC staff documented the worst drought since the development of the Drought Management Plan (DMP) in 2001. By September 2016, the entire state had reached the Watch or Warning drought level, with conditions returning to normal only in April 2017. With this experience, staff is revising the DMP to allow for earlier detection of drought onset and potentially earlier actions to mitigate impacts to farmers, the environment and others. Internal workgroups for the drought indicators and for actions met through FY2017. Staff also started reviewing the monitoring networks to determine data gaps and improve the timeliness of data availability.</p>
<p>THE USGS COOPERATIVE PROGRAM</p> <p>www.mass.gov/eea/coop-wr</p>	<p>The U.S. Geological Survey and the Commonwealth of Massachusetts have had a water resources partnership since 1904, when the state's first modern stream gage was installed in the Connecticut River. The Cooperative program currently maintains:</p> <ul style="list-style-type: none"> 57-time streamflow gages, 4 tidal gages, 4 weather stations, and 91 groundwater observation wells <p>In FY2017, the state applied for and received a grant from USGS headquarters for replacing up to 39 groundwater monitoring wells. Staff completed the bid and award process in Spring of 2017 and began preparing for field work in cooperation with New England USGS and the State Geologist's Office.</p>
<p>WATER NEEDS FORECASTS</p> <p>www.mass.gov/eea/wnf-method</p>	<p>Commission staff work with public water suppliers to develop 15-to 20-year water needs forecasts, using a methodology approved by the Commission.</p> <p>The forecasts are used by suppliers in applying for Water Management Act (WMA) permits and in long-range planning.</p> <p>In FY2017, staff worked with 20 public water suppliers in five river basins to develop or revise forecasts. Staff also participated in outreach workshops in two basins, helping to explain the forecast process and the WMA permit renewal process.</p>

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<p>THE INTERBASIN TRANSFER ACT (ITA)</p> <p>www.mass.gov/eea/agencies/dcr/water-res-protection/interbasin-transfer-act/</p>	<p>The ITA protects Massachusetts' vital water resources and the communities that rely on them. It ensures:</p> <ul style="list-style-type: none"> • Communities transferring drinking water and wastewater between river basins practice water conservation • Hydrology and resources in the donor basin are protected • The process is transparent and promotes public input <p>In FY2017, the first update and revision of the regulations since their promulgation in 1985 took a significant step forward. Staff convened public hearings solicited written comments on the proposed revised regulations; further revisions were made, as appropriate; and staff prepared a written response to public comments received. In addition to advancing the revision of the regulations, staff reviewed a notice of project change for the 1,400-acre Union Point development (formerly Southfield and South Weymouth Naval Air Station) and continued discussions with Ashland and North Reading concerning their Requests for Additional Information for ITA review. Staff also followed up on continued compliance with conditions for ten previously approved ITA applications.</p>
<p>WATER CONSERVATION STANDARDS</p> <p>www.mass.gov/eea/wcs-2012</p>	<p>The Commission establishes the Massachusetts Water Conservation Standards, which, since 1992, have set statewide goals for water-use efficiency and provide guidance for effective conservation. In recent fiscal years, staff initiated a review and update of the standards to incorporate the latest thinking on best practices and industry standards.</p> <p>In FY2017, staff worked on a final document for internal review, with publication anticipated in FY2018. Additionally, staff finalized content for a survey of MA water suppliers to assess the challenges they face in setting water rates that effectively balance the many goals recommended in the <i>Pricing</i> chapter of the Standards. The survey will be implemented in FY2018 as part of a larger effort to identify how the state can best support suppliers in their rate setting efforts.</p>
<p>OVERSIGHT OF STATE WATER PROGRAMS</p>	<p>By statute, the Commission reviews certain water regulations promulgated by the Department of Environmental Protection (DEP), providing an additional public forum for comment.</p> <p>In FY2017, the Commission reviewed 6 water- and wastewater-related regulations related to 310 CMR and voted on 10 amendments or rescissions related to 310 CRM and 314 CMR.</p>

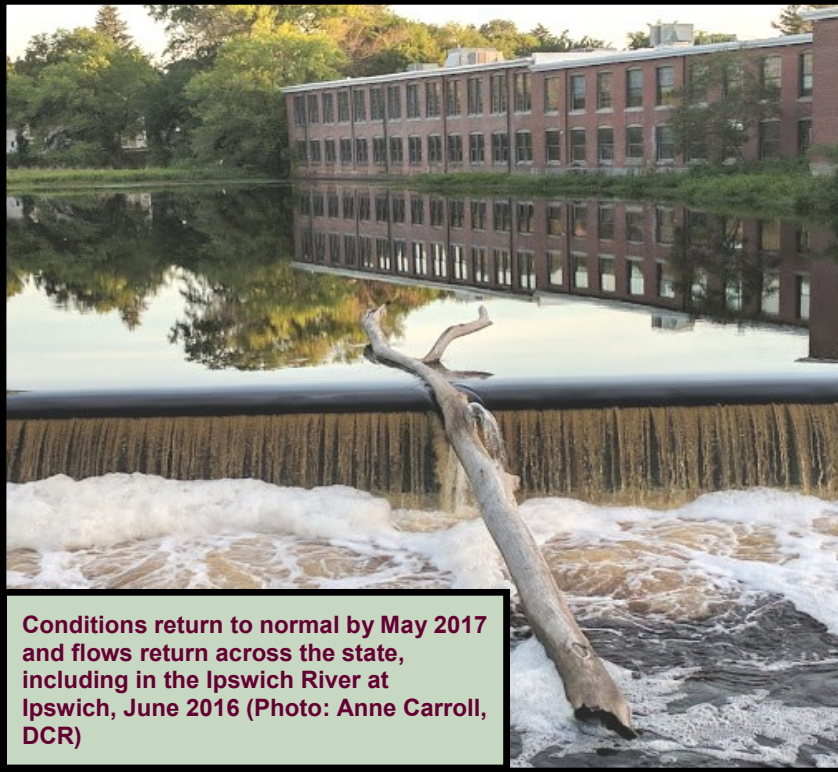
THE 2016 - 2017 DROUGHT

Progression of Drought Status,



This was the most severe drought since the 1960s — Massachusetts' drought of record.

OTHER IMAGES OF FY2017



Conditions return to normal by May 2017 and flows return across the state, including in the Ipswich River at Ipswich, June 2016 (Photo: Anne Carroll, DCR)



Jonathan Yeo presents a Governor's Citation to Roy Socolow, retiring from the USGS after 38 years of service.



Erin Graham of WRC staff measures groundwater levels, January 2017



DCR Precipitation Program Observer Gil Loud records his rain gage measurement, Amherst MA.

COMMISSION MEMBERS AND KEY CONTACTS

AGENCY MEMBERS:

Exec. Office of Energy and Environmental Affairs
Chair & Member – **Matthew A. Beaton**, Secretary
Designee - **Vandana Rao**,
Commission Executive Director

Dept. of Housing and Community Development
Member - **Chrystal Kornegay**, Undersecretary
Designee - **Linda Balzotti**

Department of Conservation and Recreation
Member – **Leo Roy**, Commissioner
Designee - **Jonathan Yeo**

Department of Environmental Protection
Member - **Martin Suuberg**, Commissioner
Designee - **Douglas Fine**

Department of Agricultural Resources
Member - **John LeBeaux**, Commissioner
Designee – **Hotze Wijnja**

Department of Fish and Game
Member - **George Peterson, Jr.**, Commissioner
Designee - **Todd Richards**

Office of Coastal Zone Management
(non-voting member)
Member - **Bruce Carlisle**, Director
Designee - **Todd Callaghan**

PUBLIC MEMBERS:

Robert Zimmerman, Charles River Watershed
Association

Thomas Cambareri, Cape Cod Commission

Kenneth Weismantel, Hopkinton, MA

Raymond Jack, Department of Public Works, Town of
Falmouth

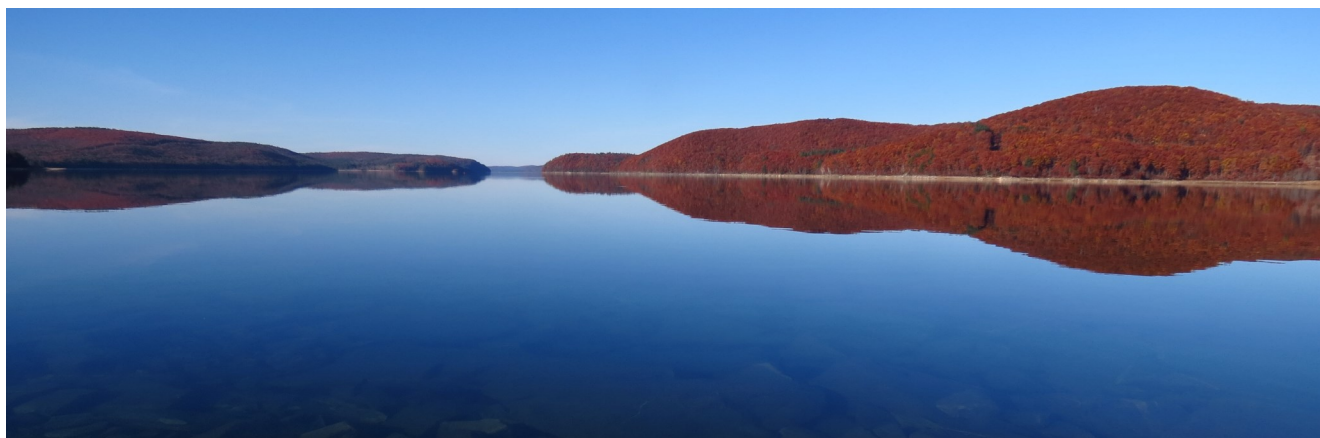
Paul Matthews, 495/MetroWest Partnership

KEY CONTACTS:

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Anne Carroll, Director DCR Office of Water Resources
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Michele Drury, Water Resources Planner
Sara Cohen, Water Resources Specialist
Vanessa Curran, Water Resources Scientist
Erin Graham, Environmental Engineer
Linda Hutchins, Hydrologist (Resigned Sept. 2016)
Viki Zoltay, Hydrologist (As of Sept. 2016)



Quabbin Reservoir (photo: Cliff Read, DCR)